THE iNFORMER

NATIONAL INSTITUTE OF DIABETES AND DIGESTIVE AND KIDNEY DISEASES

DDK FELLOWS NEWSLETTER

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In this issue

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The **iNFORMER** is published by the Fellows Advisory Board (FAB) in collaboration with the NIDDK Fellowship Office

SAVE THE DATE:
8th Annual NIDDK Fellows Scientific Retreat
March 27 – 28, 2013
Natcher Conference Center

Postdoctoral Research Associate (PRAT) Fellowship
Applications Due February 27, 2013
Apply at: https://prat.nigms.nih.gov.
More information: http://www.nigms.nih.gov/Training/PRAT.htm

AAAS Fellowships Applications Due December 5, 2012
Apply at: http://fellowships.aaas.org/

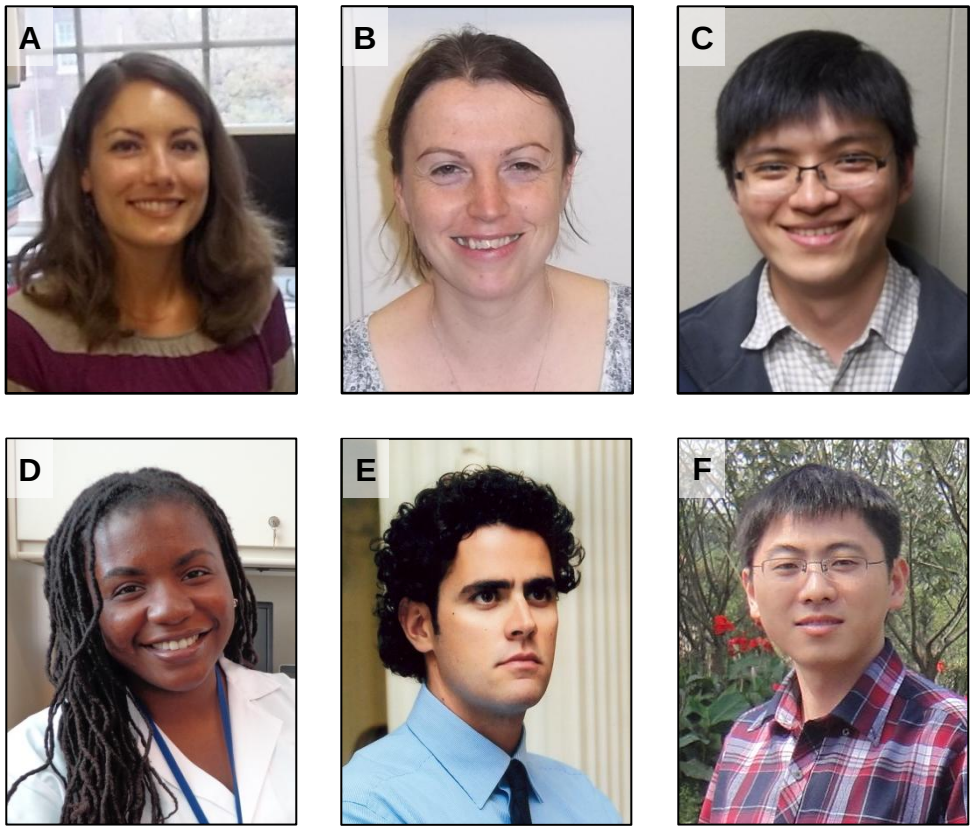
Careers in Teaching Panel Dec 11th, from 2-4 PM
Lipsett Auditorium

Felcom Holiday Party Dec 11th, 2012 at FAES House
Look out for e-mails with more details!

The iNFORMER would like to welcome new Co-Editor Joseph Tiano
His inaugural article on exercise at the NIH can be found on **page 5**.

Congratulations to our

NANCY NOSSAL AWARD WINNERS



A. Aimee Jaramillo-Lambert (LBG)
B. Alison Walters (LCMB)
C. Chen-Che Huang (LERB)
D. Dalya Lateef (DEOB)
E. Nikolaos Sgourakis (LCP)
F. Li-Quan Zhou (LCDB)

Established to honor the memory of Dr. Nancy Nossal who best exemplified an enduring commitment to excellence in mentoring, the Intramural Research Program at NIDDK offers this Fellowship Award to all of its Postdoctoral and Clinical Fellows. This highly competitive Award is aimed at the top 10% of Fellows and represents a practical, real-world grant writing experience for all candidates.

Keep-the-Thread

Flexible work options for postdocs returning from family leave

The Intramural Keep-the-Thread Pilot Program aims to offer current NIH intramural postdoctoral fellows with family responsibilities several options for increasing flexibility and temporarily reducing effort while remaining connected to their research and the NIH community. The hope is that having these options in place will encourage trainees to stay connected during times of intense care-giving needs, and should facilitate eventual full re-entry into the NIH community. The program would incorporate a variety of flexible arrangements, to be mutually agreed upon by the fellow and PI, with approval of the Scientific Director (SD). These arrangements could vary from increased use of telework and flexible scheduling to temporary reductions in effort, and would include necessary modifications of project timelines. **These options are NOT intended to take the place of standard parental leave**, which entitles IRTA fellows to eight weeks of paid leave following the birth or adoption of a child. These policies may be implemented upon returning from parental leave or when faced with family situations not covered by the NIH parental leave policy.

The goal of this program is to retain NIH fellows through short periods in their careers when they require accommodations to successfully balance their research with family responsibilities. By increasing flexibility and enabling reduction to part-time status, fellows will be given options that facilitate "keeping the thread" of their research programs until they are ready to completely re-enter the scientific workforce. This program is designed to create a framework through which fellows and PIs can explore all mutually agreeable options that would allow the fellow to attend to family responsibilities while pursuing a productive research career, while at the same time recognizing the importance of minimal disruption to a PI's research program.

Who is eligible?

- Male and Female IRTA/CRTA fellows
  Been at the NIH for ≥ 6 months

Who is NOT eligible?

- Foreign nationals on J-1 visas

What options are available?

- Part-time work
- Fee-for-service
- Special Volunteer status
- Re-entry facilitation

Keep-the-thread allows postdocs to use these options and pause/slow the 5-year fellowship clock

What do I need to take advantage of this program?

- A written agreement with your supervisor
- Approval from your Scientific Director

For more information on

…the *Keep-the-Thread* program http://sourcebook.od.nih.gov/prof-desig/Keep_the_Thread_2012.docx
…part-time regulations http://oma.od.nih.gov/manualchapters/person/2300-320-7/2300-320-7.pdf
…fee-for-service http://olao.od.nih.gov/Acquisitions/TypeOfAcquisitions/Services/ServicesMakingThePurchase.htm
…Special volunteer status http://oma.od.nih.gov/manualchapters/person/2300-308-1/2300-308-1.pdf

Hatched out

By Christine Krieger

As much as any scientist is loath to admit, from the moment researchers began accepting money from government agencies, politics and science became irreversibly intertwined. Not only do all scientists have a stake in the somewhat messy democratic process, those of us who are American citizens are obligated to be informed about what our government is doing in order to make educated decisions on whom to vote.

Yet as employees of the executive branch, NIH postdocs face restrictions in regards to political activity. According to the Hatch Act, discussing thoughts and ideas about political candidates with your colleagues at work is forbidden. Even now that the election is over, displaying "partisan items" is not permitted until after the inauguration. In a time when politics has such influence on a postdoc's future career and technology pervades every aspect of society, separating one's scientist self from their political personality becomes as challenging as removing the political ramifications from scientific discovery.

The Hatch Act past and present

In the heyday of the Gilded Age and subsequent Great Depression, the need for legislation preventing government agents from gaining unfair political advantages was undeniable. Corruption was the norm and most of the labor reforms which protect us today had yet to leave the drafting table. The Hatch Act served a vital purpose in creating a politically neutral civil service.

Today's culture has completely transformed since the time of Senator Carl Hatch. Public education exists, and information is readily available. Federal employees are given extensive training on their rights and protections under the law. The ability of a political entity to coerce a federal employee to use their position to advance the party agenda has been greatly reduced. Amending the Hatch Act to reflect this reality becomes an ever more important a priority.

Earlier this year, the Office of the Special Counsel issued a modernization of the Hatch Act. These modifications "clarify the law and make it easier to enforce." However, the legislation did not explicitly deal with the volatile issue of social media. Some of the interpretations of what is considered political activity on the internet can be surprising. The clearly-stated restriction forbidding federal employees from soliciting contributions for a political candidate blurs to confusion when the definition of solicitation extends from the monetary. In an extreme example, liking a candidate on Facebook is viewed as political donation, therefore asking others to like a candidate, a political solicitation. Some may argue that Facebook "Likes" have minimal impact on the brand of clothes you buy, much less the recipient of your vote.

The citizen-scientist

The Hatch Act protects our political rights as much as it may restrict them. As controversies surrounding evolution and stem cell research have shown, scientists cannot afford to remove themselves from contemporary issues. Though being politically active while in the employ of the NIH is more complicated, exercising the right to participate in this country's political future is undoubtedly worth the effort.

Read more on...

The Hatch Act
http://www.osc.gov/hatchact.htm

History of the Hatch Act
http://www.answers.com/topic/hatch-act#ixzz2CbtJXzjA

Hatch Act Modernizaton
http://www.federalnewsradio.com/521/2778134/Analysis-Hatch-Act-modernization-good-for-feds-better-for-locals

Yet Another Reason to Go Work Out: A New Hormone Stimulated by Exercise Promotes Weight Loss and Protects Against Diabetes

By Joseph P. Tiano

Exercise is everyone's favorite activity to push aside when the work piles up and is the first to be replaced by more pressing endeavors. But should exercise be the first activity to go when your schedule tightens? Everyone knows that regular exercise helps prevent weight gain from fat accumulation. But the list of positive benefits from exercise seems to grow longer every month.

Exercise, independent of weight loss, decreases the risk for cardiovascular disease, stroke, type 2 diabetes and metabolic syndrome. Exercise relieves stress leaving you feeling more relaxed and helps you to sleep better. And if these are not sufficient reasons to get you off the couch, consider this evidence: exercise can lead to enhanced sexual arousal for women, and men who exercise are less likely to experience erectile dysfunction. So how does exercise promote all these positive benefits?

Over the course of the past two decades, researchers have reported numerous seminal discoveries in understanding the biology behind the benefits of exercise. For example, a protein called AMP-activated Protein Kinase (AMPK) is activated during exercise due to the decrease in the ATP/ADP ratio. AMPK is a kinase that activates signaling pathways inhibiting lipid synthesis and stimulating fatty-acid oxidation (the burning of fat) and glucose up-take from the blood. Another key signaling molecule directly involved in exercise is Peroxisome Proliferator-Activated Receptor delta (PPARδ), a nuclear transcription factor. Mice with increased PPARδ activity are resistant to diet-induced obesity and can run twice as far—with no prior training—as wild type mice, giving them the nickname "marathon mice." Although these discoveries contributed greatly to understanding the benefits of exercise, neither has thus far been successfully developed as a weight loss drug.

In January 2012, Bruce Spiegelman and coworkers reported in the journal *Nature* the discovery of a new hormone, irisin, involved in energy metabolism. Irisin is secreted from muscle cells during (or following) exercise. Irisin is a cleavage product of a previously discovered membrane protein called Fibronectin Type III Domain Containing 5 (FNDC5). The extracellular N-terminal region of FNDC5 is cleaved, releasing irisin into the blood where it is transported to white adipose tissue (WAT). Irisin binds a yet unknown receptor on WAT and increases fatty-acid oxidation, thus promoting weight loss. In addition, irisin protects against type 2 diabetes in mice fed a high-fat diet through a currently unknown mechanism.

Currently, irisin has only been demonstrated to signal in WAT, but given that most other hormones signal in an abundance of different tissues, it is only a matter of time before researchers report the "hypothesized" beneficial effects of irisin on other tissues involved in energy expenditure.

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It has been eloquently demonstrated that irisin protects against high-fat diet-induced weight gain in mice, but important questions remain: (1) do humans have irisin, (2) is irisin induced by exercise in humans and (3) can irisin be developed as a weight loss drug? To date, two research groups have demonstrated that humans have circulating irisin and that exercise increases irisin in their blood. However, it is far too early to say whether the exercise-induced increase in circulating irisin in humans is contributing to the beneficial effects of exercise. Irisin may or may not lead to the development of the long sought after "exercise in a pill." But what we do know is that exercise provides numerous health benefits; all you have to do is get off the couch (or out of the lab) and work out for 30-45 minutes a few times a week.

The NIH has several ways that you can stay active while maintaining your productivity in the lab.

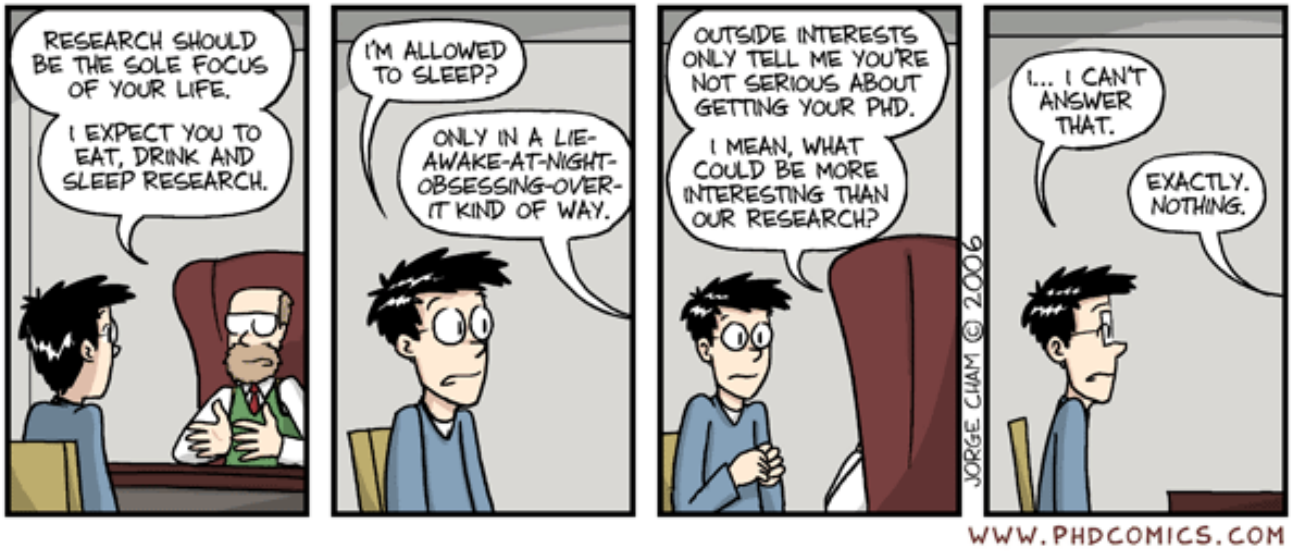
1. An on-campus gym located in the basement of bldg. 31 that has cardio equipment, weight machines, free weights and a locker room with showers. It's relatively cheap, priced at $21/month ($30-60/month elsewhere). http://www.recgov.org/fitness/index.htm

2. The NIH Health's Angles Running club sponsors campus runs, helps you find running/jogging partners and posts information about local races. http://nihhealthangels.groupsite.com/main/summary

3. The Recreation & Welfare Association (R&W) sponsors crossfit classes and yoga classes in bldg. T-39. http://crossfitbldgt39.blogspot.com/

4. The R&W will be starting a Triathlon training program in February 2013. If this is too intimidating see the Health's Angles Running Club for beginner running classes.

5. The R&W has many other clubs to keep you active, such as: the Bicycle Commuter Club, the Hiking Club, the Weightlifting Club, the Martial Arts Club and the Ski Club. http://www.recgov.org/r&w/clubs.html and http://www.facebook.com/NihRwFitness



Upcoming Fitness Events

Featured Group Fitness Classes

Brazilian Jiu-Jitsu & Self Defense with Greg
Location: Rockledge Fitness Center
Day/Time: Monday at 5:30pm
Cost: Drop-in $18, 2 months-$126

Indoor Cycling
Location: The Loft (T-39)
Day/Time: Monday 5:15pm, Tuesday and Thursday at 5:30pm (through December 20)
Cost: Drop-in: $10, 5 classes for $45, 10 classes for $90

Zumba with Ileana
Location: The Loft (T-39)
Day/Time: Wednesday at 5:30pm
Cost: Drop-in: $5

Vinyasa Yoga with Suzie
Location: The Loft (T-39)
Day/Time: Thursday at 1:10pm
Cost: Drop-in: $15, 5 classes for $60, 10 classes for $120

Finally Fit with Lubomyr
Location: EPS Room T-51
Day/Time: Thursdays at 1:15pm (through December 20)
Cost: Drop-in: $10, 5 classes for $45, 10 classes for $90

Other Events

Foam Roller Workshop with Graham King
Day/Time: Wednesday, December 12th 1:15-2:15pm
Location: Clinical Center 1SE Patio Room

Crossfit Competition
Day/Time: Wednesday, December 5, First heat begins at 12:30, last heat begins at 1:15pm
Location: The Loft (T-39)

*This event is FREE, but pre-registration is required by **December 4th**. For details, more information or to register, please **email Michael Donovan at donovanm@mail.nih.gov**.*

New programs for the New Year!

- New group fitness classes: Yoga, Indoor Cycling, Dance, Boot Camp, Pilates, Abs
- New Workshops: Weightlifting, Bicycle Repair, Salsa Dance, and more!

Beginning mid-January 2013, the R&W Fitness Program will be offering various workshops. To view the workshop schedule and register for a Winter or Spring workshop, please stop by any R&W Fitness Center location or sign up online at **http://www.recgov.org/fitnesscart**

Workshop registration will open December 10th

Super Storm Sandy

Operation Photo Rescue

CALLING ALL DIGITAL IMAGE EXPERTS!!!

Some of the most precious possessions lost by those fleeing hurricane Sandy are the irreplaceable photographs that connect us with our past. **Operation Photo Rescue** *and* **All Hands Volunteers** *are two non-profit organizations looking for volunteers with the skill to digitally retouch damaged photos*

You can help

The Gordian Knot

Photographer: Arnaud Carpentier

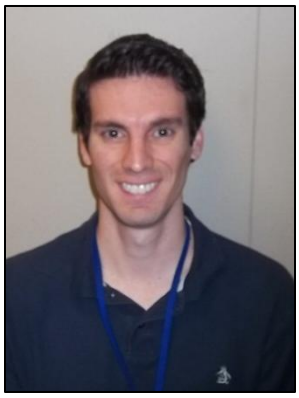
Turn this…

…into this

For more information about volunteering

http://www.operationphotorescue.org/volunteer/
http://hands.org/2012/10/27/hurricane-sandy/

Welcome New Fellows

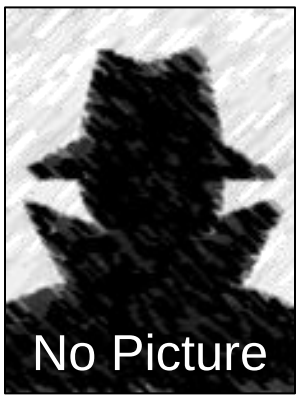


Cameron Schweitzer
IRTA
PhD, Creighton University
Liver Diseases Branch (Liang) Bldg 10

Edgar-John Vogt
Visiting Fellow, Germany
PhD, University of Bielefeld
Laboratory of Cellular and Developmental Biology (Dean) Bldg 50

Evgeny Kiselev
IRTA
PhD, Purdue University
Laboratory of Bioorganic Chemistry (Jacobson) Bldg 8

Gwendoline Rahir
Visiting Fellow, Belgium
PhD, University of Brussels
Diabetes, Endocrinology and Obesity Branch (Tarbell) Bldg 10



James Arnone
IRTA
PhD, Wesleyan University
Laboratory of Cellular and Molecular Biology (Cohen-Fix) Bldg 8

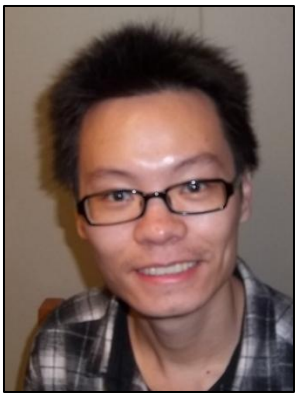
Jeanne Morin-Leisk
IRTA
PhD, Carnegie Mellon University
Laboratory of Cellular and Molecular Biology (Hinshaw) Bldg 8

Joseph Tiano
IRTA
PhD, Northwestern University
Diabetes Branch (Rane) Bldg 10

Rebecca Meseroll
IRTA
PhD, Dartmouth College
Laboratory of Cellular and Molecular Biology (Cohen-Fix) Bldg 8

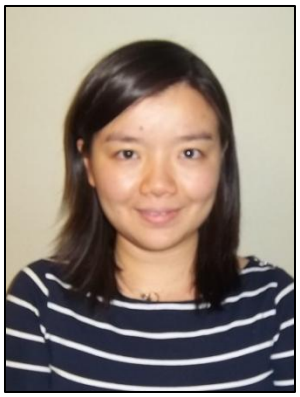
Welcome New Fellows

Ruchika Sharma
Visiting Fellow, India
PhD, Indian Institute of Science
Laboratory of Biochemistry and Genetics (Maisson) Bldg 8



Rui Li
Visiting Fellow, China
PhD, Institute of Pasteur of Shanghai
Liver Diseases Branch (Liang) Bldg 10

Saibal Chakraborty
Visiting Fellow, India
PhD, University of Maryland
Laboratory of Bioorganic Chemistry (Jacobson) Bldg 8



Shanshan He
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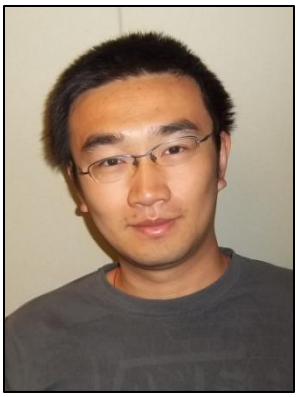
Liver Diseases Branch (Liang) Bldg 10



Shoujun Gu
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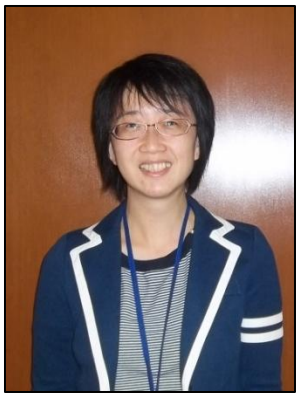
Xiaoning Wang
Visiting Fellow, China
PhD, The University of Mississippi
Laboratory of Bioorganic Chemistry (Bewley) Bldg 8 A



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